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WATCHING THE WEATHER WITH UNCLE SAM

The ninth of a series of ten talks by Welby R. Stevens, assistant forecaster, United States Weather Bureau, delivered through Station WRC and 32 other stations associated with the National Broadcasting Company, February 3, 1930.

Next to the tornado, the hurricane is the most severe type of storm. The amount of damage and loss of life averages higher in hurricanes, however, because they are much larger and persist for a quarter length of time. A hurricane is in progress for more than a week as a rule, while a tornado covers its entire path in a couple of hours or less.

June to October is known as the hurricane season. We have records of only three that have developed in any other months since 1886. The height of the season is reached during August and the first part of September. Over 50% originate in this period of approximately six weeks.

During the early and latter parts of the season most of the hurricanes develop either over the western portion of the Caribbean Sea or the Gulf of Mexico. In the middle of the season the great majority develop to the east of the Windward Islands in the region southwest of the Cape Verde Islands.

The majority after a westward movement of greater or lesser length re-curve to the northward, finally turning to the northeast. Some, however, move without recurve to Central America, Mexico, and the west Gulf Coast, and a few even to the South Atlantic Coast of the United States. The recurve may take place at almost any point, some recurving northward in the Gulf of Mexico, others off the Atlantic Coast and still others to the east of Bermuda.

Hurricanes are nearly circular in form. When they are well-developed they are usually 300 to 800 miles in diameter, but near their origin some may be no more than 50 miles across. The average speed with which the center moves is between 10 and 15 miles per hour but the wind, since it blows spirally inward toward the center, has a velocity many times that amount.

One peculiar feature of a hurricane is its well-marked center. As the storm approaches the wind rages with great violence, usually between 75 and 120 miles, but occasionally as much as 150 miles per hour. Rain falls in torrents. But in the center the wind drops to a light breeze, rain ceases and sometimes blue sky may be seen through breaks in the clouds. The diameter of the center may be from 8 to 30 miles. As the hurricane continues to travel and the center passes over the observer the winds rise again as abruptly as they dropped and attain a violence equal to that they had before, but from the reverse direction. Heavy rain again falls. On account of the peculiar characteristics of the center it is often referred to as the "eye of the storm". People who experience a hurricane often believe that the storm is over, when in reality they may be near the center. They go about their duties, often remove barricades that had been erected for protection against the storm and are thus caught unawares, when after a half hour or so the storm resumes its fury.

During the hurricane season the Weather Bureau is constantly on the alert to detect the first signs of the development or approach of these storms in order that people and ships in the danger area may be adequately warned and seek safety. A large amount of credit for the success that has been attained in this work is due to the interest of the personnel of the vessels and the fidelity with which they transmit their observations to us by radio.

On next Wednesday we shall tell you about some of the problems that confront a forecaster when he makes his predictions.

